

REMARKS

Reconsideration of the application, as amended, is respectfully requested. By this amendment, claims 1, 6-7, 9, 14-15, and 21 have been amended.

The amendment to claims 1, 9 and 15 defines, "one of the first and second processors slaved to the other of the first and second processors." Support for this limitation is found in the original specification, as found on page 6, lines 17-19. In addition, the claim language has been amended to recite the "parallel data highways" in several places. Support is found in the original specification and claims, and the new recitations are intended to consistently reference the use of the parallel data highways. It is believed that this consistent use clarifies that the invention uses two processors and that the two processors communicate using parallel data highways.

The amendment to claim 21 defines, "the first HDLC encoding and the second HDLC encoding facilitating error correction over the wireless interface while providing for the integrity of first HDLC encoded data over the wireless interface." Support for this limitation is found in the original specification, at page 7, lines 13-18.

In the Office Action, claims 1-20 were rejected under 35 U.S.C. §103 over U.S. Patent No. 6,101,198 (Koenig et al.), in view of various combinations of applicant's admitted prior art, U.S. Patent No. 6,415,384 (Mergard et al.), U.S. Patent No. 6,058,111 (Beyda et al.); U.S. Patent No. 6,301,291 (Rouphael et al.) of U.S. Patent No. 5,063,592 (Cannella et al.) These rejections, as applied to amended claims 1-20, are respectfully traversed.

Claims 1, 9 and 15 define, "one of the first and second processors slaved to the other of the first and second processors."

In addition, these claims define:

a first processor for controlling data transfer between the plurality of highways and sending data using a sub plurality of the parallel data highways;

a second processor sending data using a single one of the parallel data highways... . (Claim 1.)

It is submitted that this language both defines the use of the two processors communicating using parallel data highways and the use of the two processors communicating using parallel data highways.

The above limitations are believed to clearly define the present invention over Koenig et al. Specifically Koenig et al. does not disclose two processors communicating using parallel data highways, but instead describes two processors DSP (Engine) 24 and DSP (Host) 22 in a different environment. In that arrangement, only the DSP (Engine) communicates using the PCM channels. The DSP (Host) has its own connection with the DSP (Engine) and has an interface for a high speed V.3 for modem to connect to a secondary T 1 line, such as for an internet connection. Accordingly, Koenig does not disclose "a second processor sending data using a single one of the parallel data highways", and therefore does not disclose the elements of the claims.

Accordingly, the prior art of record fails to suggest the invention as claimed.

It is further noted that the combination of these claim limitations defines the use of two processors communicating using parallel data highways, with one processor slaved. This clearly defines both the particular use of the "parallel data highways" within the context of the present invention, and the use of a slaved processor with at least one parallel data highway.

In the Office Action, claims 21-23 were rejected under 35 U.S.C. §103 over U.S. Patent No. 5,483,556 (Pillan) and U.S. Patent No. 5,381,422 (Shimizu), or Pillan, taken in view of Shimizu and U.S. Patent No. 6,415,384 (Mergard et al.) Applicants respectfully traverse this rejections as applied to the amended claims. There is no suggestion in the prior art of record to modify Pillan in a manner which would implement the use of a second HDLC encoding as in the present invention. Pillan discloses taking a HDLC encoded field and stripping off various information, such as the flag fields. The resulting stripped field is run through a form of compression algorithm and then framing information is added prior to transmission. The purpose of Pillan is to reduce the amount of HDLC encoded data. As shown in Figure 4. Accordingly, Pillan clearly teaches away from using a second HDLC encoding as in the present invention. Such an encoding would clearly increase the data rate, which Pillan is clearly trying to avoid. Accordingly, Pillan does not only lack any motivation or suggestion for double HDLC encoding, it actually teaches away from such encoding. This double HDLC encoding is now clearly presented by Applicants' claims.

Applicants' claim 21 now defines "the first HDLC encoding and the second HDLC encoding facilitating error correction over the wireless interface while providing for the integrity of first HDLC encoded data over the wireless interface." This provides a function which is neither shown nor suggested by the prior art of record, either separately or in combination. To do so would require adaptation of the Applicants' disclosure to the prior art ("hindsight reasoning").

As previously mentioned, Shimizu discloses essentially using two parity fields to detect errors. One parity field P1 is for detecting errors in the vertical direction and the second parity field P2 is for detecting errors in the horizontal direction. Such horizontal and vertical encoding is not relevant to Applicants' double HDLC encoding. In contrast, HDLC encoding provides that the data is

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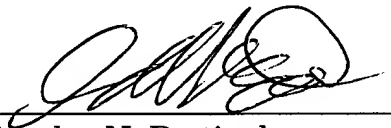
encoded and the encoded data includes all of the added information is then encoded in the same format. Shimizu does not do that. In addition, the use of the horizontal and vertical parity fields does not perform Applicants' function of "the first HDLC encoding and the second HDLC encoding facilitating error correction over the wireless interface while providing for the integrity of first HDLC encoded data over the wireless interface."

It is therefore submitted that the application, as presently amended, defines patentable subject matter. Therefore, the application is in a condition for allowance. Such allowance at an early date is respectfully requested.

If the Examiner feels that a conference will expedite the prosecution of this case, the Examiner is cordially invited to call the undersigned. To that end, an Examiner's amendment to this case would be welcomed and appreciated.

Respectfully submitted,

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